

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Closed Captioning of Internet Protocol-Delivered	)	MB Docket No. 11-154
Video Programming: Implementation of the	)	
Twenty-First Century Communications and Video	)	
Accessibility Act of 2010	)	

To: The Commission

**COMMENTS OF MICROSOFT CORPORATION**

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The Commission’s proposals in the above-captioned Notice of Proposed Rulemaking (“NPRM”) for implementing the Twenty-First Century Communications and Video Accessibility Act of 2010 (“CVAA” or “Act”) are vital to accomplishing the goal of turning this historic legislation into practical rules that will guide industry and promote closed captioning for persons who are deaf or hard of hearing, while also encouraging innovation and not stifling technological enhancements. Microsoft Corporation (“Microsoft”) supports the Commission’s goal of “requir[ing] the provision of closed captions with IP-delivered video programming in the manner most helpful to consumers, while ensuring that our regulations do not create undue economic burdens for the distributors, providers, and owners of online video programming.”<sup>1</sup>

**INTRODUCTION AND SUMMARY**

Microsoft long has been committed to ensuring that people with disabilities, including the deaf and hard of hearing, can enjoy the same broad, meaningful access to communications technologies as other Americans. Many Microsoft products and services, including the Windows

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<sup>1</sup> NPRM, ¶ 1.

7 operating system and Office 2010, have built-in accessibility features, options for user customization, and compatibility with third-party assistive technologies. For instance, the Windows 7 “Sound Sentry” allows users to employ text or other visual alternatives to sounds.

Microsoft also supports a number of organizations globally whose goals are to improve the technology available to people with disabilities. For instance, Microsoft helped found the Accessibility Interoperability Alliance, which works collaboratively to design solutions for unresolved interoperability issues and reduce the overall cost of developing both accessible and assistive technology. Microsoft also serves on the Board of the Assistive Technology Industry Association, which establishes best practices to help ensure that the best products and services are delivered to people with disabilities. For more than two decades, Microsoft has worked closely with representatives of the disability community, nongovernmental organizations, other industry leaders, standards setting organizations, and government bodies in the U.S. and abroad with the objective of creating a vibrant, healthy and accessible information and communication technology ecosystem.

Based on this deep experience, Microsoft encourages the Commission to adopt workable and clear rules that achieve the important goal of increasing access to closed captioning for the deaf and hard of hearing, while also encouraging innovation and competition in the development of software and hardware for use in audiovisual display. Specifically, we urge the Commission to:

1. Adopt its proposed definitions with respect to the meaning and scope of “video programming”;
2. Adhere to its proposed definition of and allocation of responsibility for video programming owners, but clarify that video programming providers and distributors are distinct categories of entities subject to distinct responsibilities;
3. Decline to impose website design obligations on video programming providers or distributors;

4. Clarify that the *de minimis* standard would exclude one-time, unintentional errors;
5. Clarify that the term “apparatus” does not include software;
6. Define “video programming” consistently between Section 202(b) and Section 203;
7. Employ a “functional equivalence” quality standard for closed captioning;
8. Permit any technical standard for captioning adopted by an open, transparent process by a recognized industry standard-setting organization to be deemed compliant with the Commission’s requirements; and
9. Grant a 24-month compliance deadline for video programming providers/distributors and apparatus manufacturers, who must undertake novel engineering tasks.

**I. THE COMMISSION’S APPROACH TO SECTION 202(b) IS MOSTLY SOUND BUT IT SHOULD PROVIDE MORE CLARITY IN KEY AREAS**

In general, Microsoft supports the NPRM’s sound proposals with respect to implementation of Section 202(b) of the CVAA. However, the Commission should clarify that video programming providers and distributors are distinct categories of entities subject to distinct responsibilities. Moreover, the Commission should avoid mandating any specific website layout obligations with respect to access to captioning. Finally, the Commission should add greater clarity to its *de minimis* standard and greater flexibility to its proposed compliant response process.

**A. The Commission’s Proposed Definition Correctly Construes The Term “Video Programming”**

The Commission tentatively concludes that “video programming” subject to the obligations imposed by CVAA Section 202(b) will include only “full-length programming.” It specifically proposes that “full-length” programming will not include “outtakes,” meaning

“content that is not used in an edited version of video programming shown on television,” or “video clips,” meaning “small sections of a larger video programming presentation.”<sup>2</sup> Microsoft supports these proposals, which appropriately effectuate the statutory mandates to regulate only “programming by, or generally considered comparable to programming provided by a television broadcast station, but not including consumer-generated media”<sup>3</sup> and to regulate only “video programming once published or exhibited on television.”<sup>4</sup>

Additionally, the Commission proposes requiring closed captioning on IP-delivered video programming only for programming that was published or exhibited on television with captions in the United States.<sup>5</sup> We support the Commission’s principled and pragmatic conclusion that a broader approach would exceed the jurisdiction granted by the CVAA and would pose severe complications to parties subject to multiple national captioning standards.

**B. The Commission Properly Defines and Identifies the Responsibilities of Video Programming Owners; However, It Should Distinguish Video Programming Providers and Distributors**

We support the Commission’s proposed definition of and identification of responsibilities for a “video programming owner” (VPO). However, we explain that the Commission should define “video programming provider” (VPP) and “video programming distributor” (VPD) as distinct categories subject to distinct responsibilities.

VPO: We support the Commission’s proposal to define VPO to mean “any person or entity that owns the copyright of the video programming delivered to the end user through a

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<sup>2</sup> *Id.* ¶ 21.

<sup>3</sup> 47 U.S.C. § 613(h)(2).

<sup>4</sup> *Id.* § 613(c)(1).

<sup>5</sup> NPRM, ¶ 22.

distribution method that uses IP.”<sup>6</sup> Defining the VPO to be the copyright holder is essential to ensuring that the VPO has the necessary rights to caption the video programming.

We also support the Commission’s proposed approach to the assignment of VPO obligations.<sup>7</sup> Specifically, we agree that VPOs should be required to caption the program and send the required caption files to the VPP along with the program files or in the alternative provide a certification that captions are not required. Such a framework is necessary because (a) VPOs are in the best position to assess whether captions are required for a particular program since they have knowledge of which content has been shown on television, and (b) as the copyright holders, the VPOs typically possess the necessary legal rights to modify the content and insert closed captions.<sup>8</sup> Thus, the Commission’s proposal correctly lines up knowledge to comply and the ability to cure with the entity that possesses both.

VPP and VPD: Although the Commission proposes applying the same definition to VPP and VPD, the Commission should define the two categories and the responsibilities for entities

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<sup>6</sup> *Id.* ¶ 15.

<sup>7</sup> *Id.* ¶¶ 16, 35.

<sup>8</sup> The Copyright Act grants broad, exclusive rights to owners of copyrights in audiovisual works. A VPP likely would be found to infringe upon many of those exclusive rights, including infringement of reproduction rights, adaptation rights, distribution rights, and public performance rights, if it acted without permission to insert closed captioning for a copyrighted video program. *See generally* Agee v. Paramount, 59 F.3d 317, 324 (2d. Cir. 1995) (explaining that Paramount infringed plaintiff’s reproduction rights at the moment it put portions of his recording on tape to make a segment for another medium); Nimmer on Copyright § 8.01[B] (2010) (“The fact that a work in one medium has been copied from a work in another medium does not render it any the less a copy. Thus, a motion picture copied from a play, or a novel, a sketch copied from a photograph, or a plaque, or a doll copied from a cartoon may be an infringing copy.”) (citations omitted). The addition of captioning also is likely to require the VPP to decrypt the digital rights management protections that accompany many video files, leading to a separate violation of the Digital Millennium Copyright Act. In the process of synchronizing captions and video description, in many cases the VPP would need to “break” (*i.e.*, decrypt) the digital rights management protection embedded in the file provided by the program owner. Doing so without authorization would be a violation of the Digital Millennium Copyright Act, which prohibits the “circumvent[ion of] a technological measure that effectively controls access to a work protected by copyright, including by decrypt[ing] an encrypted work.” This provision of the DMCA is codified at Section 1201(a) of the Copyright Act, 17 U.S.C. § 1201(a).

therein distinctly.<sup>9</sup> The purpose of distinguishing VPP from VPD is to ensure that responsibility for receiving certification or rendering captioning from VPOs is properly allocated. In the Internet ecosystem, some parties are the ‘primary’ transmitter of the program to end users, while others play merely a pass-through role. It is important that the Commission’s definitions distinguish the identities and responsibilities of each:

- VPP: The Commission should define VPP to mean any entity that makes available directly to the end user video programming through a distribution method that uses IP and either (a) is in privity with the VPO with respect to the particular video programming or (b) has control over the content of the particular video programming or the determination of whether to display the particular video programming to end users. A VPP would be subject to the obligations that the Commission proposed in its NPRM would apply to both VPDs and VPPs.<sup>10</sup> Specifically, the responsibility of a VPP is to pass through the captioning provided by the VPO (or its agent) or to check the certification from the VPO (or its agent) if the video programming is not captioned.
- VPD: The Commission should define VPD to mean any entity that makes available an IP distribution method for use by a VPP to distribute video programming and in doing so the VPD is not acting as a VPP or VPO for these purposes. A VPD would be subject only to the obligations (a) to pass through any

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<sup>9</sup> The Commission proposes defining VPP/VPD as “as any entity that makes available directly to the end user video programming through a distribution method that uses IP.” NPRM, ¶ 15.

<sup>10</sup> See *id.* ¶¶ 16, 36.

captioning it receives from a VPO or VPP and (b) not to degrade or block any captioning it receives.

Limiting the certification-related obligations to the party in privity with the VPO or otherwise in control of the programming appropriately assigns responsibility to the party most easily able to obtain such information from the VPO. Additionally, assigning such a task with greater granularity avoids creating confusion as to responsibility or overburdening parties that play a passive role.

To provide additional clarity between the responsibility of VPOs and VPPs, we recommend that the Commission should explicitly state that VPP reliance on VPO captioning or certification constitutes a “safe harbor” for compliance under the CVAA. We support the Commission’s proposed rule that VPOs are responsible for non-compliant certifications, and as long as the receiving entity does not know or have reason to know that a certification is erroneous, it would not be subject to an enforcement action based on an erroneous certification.

We emphasize that regardless of how captioning responsibilities apply to VPOs, VPPs, and VPDs, such responsibilities must extend only so far as the programming in question meets the Commission’s proposed definition of “video programming.” The Commission lacks authority under the CVAA to impose any mandate requiring VPPs, VPDs, or any other party to display captioning over Internet Protocol where the programming fails to meet the definition of “video programming” that the Commission develops pursuant to the statute. If a VPO or any other party voluntarily chooses to caption a program that is not subject to the CVAA captioning rules, the Commission must leave the determination of whether to pass through the captioning to the discretion of the VPO, VPP, and VPD. Additionally, the Commission should clarify that a

complaint that alleges any failure with respect to programming not subject to the CVAA's captioning requirement will be dismissed as soon as that defect in the complaint is discovered.

**C. The Commission Should Not Require VPDs/VPPs to Include Specific Elements in Their Website Design**

The Commission asks, “should we require the VPD/VPP to provide a mechanism, such as a button or icon, on its website which would allow consumers to easily access closed captioning?”<sup>11</sup> Consistent with the need for flexibility, VPDs/VPPs must retain the freedom to make design decisions as to their own websites, and the Commission should not regulate any rigid layout elements. Web design is a rich area of innovation, and any design mandate risks calcifying layouts that would otherwise rapidly become outdated. A layout element that made sense for a frame-based website designed in 1998 would not make sense in a clean-appearing CSS-based layout designed in 2005, nor will an element from 2005 make sense in a multimedia HTML 5 site created in 2013. Moreover, industry participants are in the best position to assess how to communicate information to their customers online. In contrast to certain user interface elements, Congress did not grant the Commission any authority over VPD/VPP websites, suggesting that Congress did not view such regulation as appropriate.<sup>12</sup> Rather than mandate any specific method of communication, the Commission should outline the goals of the communication it wishes for VPDs/VPPs to make, and VPDs/VPPs should be free to implement whatever approaches they feel will be most likely to achieve those goals successfully.

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<sup>11</sup> *Id.* ¶ 16.

<sup>12</sup> *Cf.* 47 U.S.C. §§ 303(aa)-(bb) (granting rulemaking authority with respect to certain user interface elements). Insofar as the Commission wishes to and has the necessary authority to regulate any user interface element of an apparatus, it must only do so after the VPAAC issues its report on the subject and following a subsequent rulemaking proceeding pursuant to Sections 204 and 205 of the CVAA.

**D. The *De Minimis* Standard Should Exclude One Time, Unintentional Errors**

The CVAA requires that “*de minimis*” failures to comply with the closed captioning obligations of Section 202(b) not be treated as a violation.<sup>13</sup> In determining whether a violation is *de minimis*, the Commission proposes considering “the particular circumstances of the failure to comply, including the type of failure, the reason for the failure, whether the failure was one-time or continuing, and the timeframe within which the failure was remedied.”<sup>14</sup> We support the use of these factors since they have worked well in the broadcast environment. However, we urge the Commission to clarify in its Order that a one-time, unintentional machine or software failure constitutes a *de minimis* violation. Such a statement is consistent with the factors the Commission articulated in the NPRM and will provide needed guidance to both the Enforcement Bureau and to industry participants.

**II. SECTION 203 DOES NOT GRANT THE COMMISSION AUTHORITY TO REGULATE SOFTWARE MAKERS OR NON-“VIDEO PROGRAMMING” FEATURES, NOR SHOULD THE COMMISSION REGULATE WI-FI**

We urge the Commission to comply with the clear statutory limits set forth in Section 203 of the CVAA as it implements its important provisions with respect to closed caption decoding. Consistent with the statute, the Commission must limit its regulatory authority to entities that manufacture an “apparatus,” a term that excludes software. Nevertheless, the effect of Commission regulation of apparatus manufacturers will be to ensure that all downstream component makers, including chip manufacturers and software makers, undertake the steps necessary to achieve the CVAA’s important priorities with respect to captioning capability. In addition to adopting an appropriate definition and approach to obligations with respect to

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<sup>13</sup> 47 U.S.C. § 613(c)(2)(D)(vii).

<sup>14</sup> NPRM, ¶ 41.

apparatus manufacturers, the Commission also should construe the term “video programming” as being equivalent in Sections 202 and 203. It also should not regulate Wi-Fi devices as “interconnection mechanisms,” as such regulation would be unnecessary potentially deleterious

**A. The Term “Apparatus” Does Not Include Software, and the Commission Must Recognize that It May Not Impose Obligations on Software Developers**

The Commission seeks comment on the meaning of “apparatus,” the key threshold issue as to the scope of obligations under the CVAA Section 203.<sup>15</sup> It asks more specifically “whether apparatus also includes software.”<sup>16</sup> The clear answer is that “apparatus” includes only physical devices and excludes software as a standalone product or as a component of a regulated device. First, the plain meaning of “apparatus” is “a set of materials or equipment designed for a particular use.”<sup>17</sup> Second, under the statute it is necessary for an “apparatus” to “use[] a picture screen of any size.”<sup>18</sup> Of course, only a physical device may possess a picture screen. Finally, the statute “exempts” from the Section 203(a) obligations “any apparatus or class of apparatus that are display-only video monitors with no playback capability.”<sup>19</sup> This language further establishes that display-only video monitors, though exempt from applicable requirements, are a type of “apparatus” within the meaning of the statute. All of these textual references along with the common understanding of the word point to the conclusion that software is not an “apparatus.”

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<sup>15</sup> NPRM, ¶ 49.

<sup>16</sup> *Id.* ¶ 51.

<sup>17</sup> Merriam-Webster Dictionary. *See also* Oxford English Dictionary (defining “apparatus” to mean, *inter alia*, “equipments, material, mechanism, machinery; material appendages or arrangements”).

<sup>18</sup> 47 U.S.C. § 303(u)(1).

<sup>19</sup> *Id.* § 303(u)(2)(B).

Because Section 203 applies to an “apparatus,” Commission authority to require compliance properly extends only to the manufacturer of that apparatus. The CVAA does not provide any authority over anyone other than the manufacturer of an apparatus. Since, as discussed above, the term apparatus excludes software, the Commission may not exercise authority pursuant to Section 203 over makers of software or components that are included in the devices whose manufacturers are properly subject to Commission authority under Section 203.

Nevertheless, we emphasize that although the Commission’s authority under CVAA Section 203(a) is limited to a manufacturer of an apparatus, nonetheless the effect of its rules will be to ensure that software makers and makers of components for physical devices will help solve the problem of ensuring devices meet the standards the Commission will establish. Those subject to Commission regulation — apparatus manufacturers — will obtain agreements from component makers ensuring that the components they receive (including software) are sufficient for such manufacturers to meet their compliance obligations. Therefore, consistent with its goal of promoting both accessibility and innovation, Congress granted the Commission the authority over hardware manufacturers necessary to implement Section 203(a) without granting superfluous authority over software makers and other component makers.

**B. “Video Programming” Must Be Defined Consistently**

The term “video programming” as used in Section 203 needs to be seen in the context of the entire CVAA. Congress did not require every service that provided advanced communications to be accessible, or that every piece of video content needed to be accessible. Instead, to maximize accessibility and balance the costs and benefits of compliance, Congress in title I of the CVAA identified which advanced communications services needed to be accessible, and in title II of the CVAA it identified which video programming needed to be accessible, *viz.*, programming that has been published on television after some effective date. It is against this

backdrop that the phrase “video programming” needs to be read in Section 203. It would be illogical for Congress to direct apparatus makers to build devices that displayed every piece of video content with closed captioning while only imposing closed captioning on certain content providers. Therefore, the requirement that a covered apparatus must “be equipped with . . . capability designed to display closed-captioned video programming,” 47 U.S.C. § 303(u)(1)(A), means that the apparatus must display “video programming delivered using Internet protocol that was published or exhibited on television with captions,” 47 U.S.C. § 613(c)(2)(A).<sup>20</sup>

Accordingly, Section 203 does not impose any legal obligation on apparatus manufacturers with respect to the display of closed captioning contained in “video programming” that was not shown on television, was not full-length programming, was user-generated content, or was shown only outside of the U.S. Nevertheless, once apparatus manufacturers ensure that their devices can display closed captioning for “video programming” meeting the criteria described above, then the device will be capable of displaying video with closed captioning that are compliant with the standard being used within the device regardless of whether such “video programming” meet the criteria described above.

### **C. The Commission Should Not Regulate Wi-Fi Devices as Interconnection Mechanisms**

Section 203 of the CVAA states that the Commission must require that “interconnection mechanisms and standards for digital video source devices [be] available to carry from the source device to the consumer equipment the information necessary to permit or render the

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<sup>20</sup> Additionally, “video programming,” as used in both sections, means only “programming by, or generally considered comparable to programming provided by a television broadcast station, but not including consumer-generated media.” 47 U.S.C. § 613(h)(2).

display of closed captions . . . .”<sup>21</sup> Based on this provision, the NPRM asks, “Did Congress intend to cover home networking connections, such as WiFi . . . ?”<sup>22</sup> It is clear that the Commission should not.

Today, Wi-Fi access points and routers support IP generally; anything that is correctly conveyed in the IP stream will be transmitted end-to-end by these devices. Thus, a video with appropriately formatted captioning normally will transmit through a Wi-Fi access point or router without a problem. No regulation is required to achieve this result. Not only would regulating Wi-Fi be superfluous, it would be harmful. Imposing standards at too many layers of the transmission process is more likely to lead to a technical jumble and unnecessary legal wrangling than it is to promote more or better captioning. Insofar as the Commission determines to issue regulations based on its “interconnection mechanisms” authority, it should not do so when captioned video moves through a Wi-Fi router or access point, where regulation will be superfluous and harmful.

### **III. THE COMMISSION SHOULD ADOPT A “FUNCTIONAL EQUIVALENCE” QUALITY STANDARD FOR CLOSED CAPTIONING**

In the Section 202(b) context, the Commission tentatively concludes that captioning delivered over Internet Protocol must be “at least equal to the quality of the captioning of that programming when shown on television.”<sup>23</sup> Similarly, in the Section 203 context, the Commission proposes “requiring the[] same features” that “mirror[]” those “available on television receivers.”<sup>24</sup> We support the Commission’s intention to ensure that captioning of

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<sup>21</sup> 47 U.S.C. § 303(z)(2).

<sup>22</sup> NPRM, ¶ 55.

<sup>23</sup> 47 C.F.R. § 79.4(d) (proposed).

<sup>24</sup> NPRM, ¶ 56. Detailed capabilities are specified at proposed 47 C.F.R. § 15.125(b).

video programming delivered over IP and that an apparatus subject to Section 203 serves viewers adequately. However, the “at least equal to” standard and “the same features” standard proceed on the incorrect and potentially harmful assumption that the world of traditional television and IP video delivery are fundamentally the same. Captioning delivered over IP is displayed via a wide variety of operating systems, browsers, media players, and file formats; no equivalent range of possibilities faces those responsible for captioning television programming. To illustrate some of the differences, the website owner and not the browser is responsible for the closed captioning user setting, since the website decided which plug-in (e.g., Flash, Silverlight, HTML 5) will be used to display video on their site. And unlike a TV setting, a browser cannot store a single set of closed captioning user settings across all websites and all viewing sessions. Using a cookie, the browser could remember the settings for a particular site, but because of the variability of website experiences (for some of the reasons set forth above), the Commission should not mandate that feature in the online environment.

Just as there is greater variability among websites than in the television environment, the variety and range of devices that display IP-delivered video far outstrips the variety of televisions on the market. Requiring exact conformity in quality features between the television and the IP-delivered video experience may not be possible, for instance, with respect to character size due to differences in resolution capability or the user-chosen size of the video display window. Not only is such an outcome contrary to the statute’s purpose, it raises the risk (undesirable from both the Commission and industry perspective) of a large number of achievability/technical feasibility petitions in the Section 203 context.

Rather than adopt an “equal to or better” standard with the “same features,” the Commission should adopt a “functional equivalence or better” standard, which captures the

Commission's goal of ensuring closed captioning quality matching the essential nature of captioning available on television while reflecting necessary flexibility due to the differences between the size and capabilities of different devices. A functional equivalence standard appropriately gives the user the ability to access the programming without necessarily having all the same features and functions as are available on television. Essential equality in function rather than exact equality with respect to all the features and capabilities should be the goal of the Commission's rules. As noted above, the alternative may be that many apparatus makers may find it too difficult to comply with all the myriad functions and capabilities in CEA-608/708 for a seven-inch device and will declare it not achievable. That would be a bad outcome for consumers, the Commission's policy objectives, and the apparatus makers who want to do their best, within space and other limitations, to make programming accessible.

In the Section 202(b) context, the "functional equivalence" standard means that captioning delivered by IP for video programming would be the functional equivalent of the CEA-608/708 captions of the original video program in terms of factors such as text, timing, and positioning information. In the Section 203 context, the "functional equivalence" standard means that a regulated apparatus would be obligated to give consumers the functional equivalence of closed captioning given the inherent constraints of certain devices. Thus, an apparatus maker would be in compliance by making captioning available but it would not necessarily have to comply with respect to methods of dynamic presentation of captions, the availability of semantically significant formatting, the ability for the user to select language, the preservation of original captioning information where consumer selection of alternative attributes has not occurred or where consumer selection of default attributes has occurred, and as noted above, maintenance of user selection across multiple video viewings.

This approach actually will promote accessibility because it will give apparatus makers the ability to give consumers devices that are accessible even if they may not have every feature available on a large-screen TV.

#### **IV. THE COMMISSION SHOULD EMPLOY A SAFE HARBOR APPROACH TO TECHNICAL STANDARDS**

The Video Programming Accessibility Advisory Committee (“VPAAC”) recommended that the Commission adopt an interchange technical standard for closed captioning, but the NPRM now moves away from the VPAAC recommendations and proposes that the Commission not recognize any standard. Instead, the Commission proposes to leave the issue to marketplace negotiations. Similarly, the NPRM does not propose a delivery standard that apparatus manufacturers must follow in order to ensure that their devices can decode and render captions. There are two public interests in tension in this area, and they bear mention. First, as the NPRM recognizes, the marketplace is rapidly changing and the Commission is hesitant to identify a particular technology standard that may have the effect of freezing innovation. A second, equally valid interest, however, is that participants in the market need certainty regarding the technical and operational requirements imposed on them as regulatory obligations. By not addressing at all the issue of standards, the NPRM fails to address this interest. In particular, the Commission’s proposal to permit VPOs, VPPs, and VPDs complete freedom in selecting any standard to use while simultaneously requiring apparatus manufacturers to decode all captions regardless of the standards used to deliver captioned content to them fails to provide apparatus manufacturers with the guidance necessary to achieve compliance. As the NPRM is currently structured, apparatus manufacturers could be faced with the impossible task of having to design and manufacture their devices to decode any and all standards that are in use or could

conceivably become in use or risk the prospect of enforcement proceedings if they do not accommodate one or more captioning methods that are in use in the marketplace.

To balance this concern, we recommend that the Commission should recognize as compliant with its rules any “standard” adopted in an open, transparent process by a “recognized industry standard-setting organization,” as those terms are defined by the VPAAC.<sup>25</sup> Any apparatus manufacturer that designs and manufactures its apparatus to display captions according to such a standard would gain a safe harbor under the Commission’s rules. Thus, VPOs would comply with the Commission’s rules by encoding captioning in a safe harbor standard; VPDs and VPPs would comply by being capable of passing through captioning in any single safe harbor standard; and apparatus manufacturers would comply by ensuring that their devices are capable of decoding captioning in any single safe harbor standard.

SMPTE-TT, adopted in an open and transparent manner by the Society of Motion Picture and Television Engineers, is one standard that would qualify as a safe harbor, but in the future there may be other standards that also would qualify. This “safe harbor” approach balances the competing tensions identified above by giving VPDs and device manufacturers some certainty while also allowing innovation to develop alternative approaches.<sup>26</sup>

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<sup>25</sup> The First VPAAC Report defines “standard[s]” and “recognized industry standard[s]-setting organization[s]” to have the same meaning as “voluntary consensus standards” and “voluntary consensus standards bodies” as used in OMB CIRCULAR NO. A-119, Revised. *See* First Report of the Video Programming Accessibility Advisory Committee on the Twenty-First Century Communications and Video Accessibility Act of 2010: Closed Captioning of Video Programming Delivered Using Internet Protocol, July 13, 2011, *available at* [http://transition.fcc.gov/cgb/dro/VPAAC/First\\_VPAAC\\_Report\\_to\\_the\\_FCC\\_7-11-11\\_FINAL.pdf](http://transition.fcc.gov/cgb/dro/VPAAC/First_VPAAC_Report_to_the_FCC_7-11-11_FINAL.pdf) [hereinafter *First VPAAC Report*], at 17 n.33 (citing OMB CIRCULAR NO. A-119, Revised, *available at* <http://standards.gov/a119.cfm>).

<sup>26</sup> This approach is also consistent with the statutory provision that permits a party to be deemed as being in compliance through an “alternative means of compliance.” *See* 47 U.S.C. § 613(c)(3).

**V. BECAUSE THEY MUST DEVELOP NOVEL PROGRAMMING AND DEVICE CAPABILITIES, VPD/VPP AND APPARATUS MANUFACTURERS MUST BE GRANTED A LENGTHIER COMPLIANCE DEADLINE**

The Commission should establish a 24-month compliance deadline for VPDs/VPPs to comply with their obligations promulgated pursuant to CVAA Sections 202(b) and for apparatus manufacturers to comply with their obligations promulgated pursuant to CVAA Section 203; the lengthier period of time for compliance is necessary for these entities because they must undertake novel programming and engineering tasks to achieve compliance.

The Commission proposes a schedule of deadlines for compliance with Section 202(b) based on the type of programming at issue, ranging from six months from rule adoption at the shortest for prerecorded programming that is not edited for Internet distribution to eighteen months at the longest for prerecorded programming that is edited for Internet distribution.<sup>27</sup> We do not object to the proposed compliance deadlines for VPOs. However, the proposal fails to recognize that VPDs/VPPs are subject to greater demands than VPOs and accordingly deserve a greater period of time to achieve compliance. VPDs/VPPs and VPOs face fundamentally different challenges in achieving compliance, necessitating a lengthier period of time to achieve compliance for VPDs/VPPs. While determining whether programs require captions and then captioning programs as needed is undoubtedly a time-consuming process, the path to compliance is well-established from the captioning obligations that have been required in the television context for almost fourteen years.<sup>28</sup> For VPOs, many programs are already captioned; and for those that are not yet captioned, existing specialized software and transcription services with

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<sup>27</sup> NPRM, ¶ 28.

<sup>28</sup> Captioning obligations began on January 1, 1998, when Commission's rules implementing the captioning obligations established in the Telecommunications Act of 1996 became effective. *See First VPAAC Report* at 10.

experienced, skilled employees already are available. In contrast, VPPs and VPDs must undertake the novel and complex task of programming and engineering new software and hardware needed to display captioning. This process necessarily requires time for experimentation and trial and error, in contrast to the well-trodden path that VPOs must travel. In addition, a lengthier period of time is needed to accommodate service development lifecycles and the effects of the holiday purchasing season. Accordingly, we request that the Commission adopt a deadline of 24 months from the date of Federal Register publication of the final rules for compliance by VPDs/VPPs with the obligations promulgated pursuant to Section 202(b), regardless of the type of video at issue.

Similarly, because they must make novel changes across the wide variety of devices they produce, we ask the Commission for a deadline of 24 months from the publication of the rules in the Federal Register for manufacturers of an apparatus subject to Section 203 to achieve compliance.<sup>29</sup> Such a time period is critical as product development cycles are already underway for key parts of the industry ecosystem, and a 24 month compliance period would provide sufficient time to ensure future releases can build in the required captioning capabilities.

A twenty-four month compliance deadline is consistent with Commission and Congressional precedent where new captioning obligations requiring novel engineering are imposed. As the Commission notes, television manufacturers were provided approximately two years to build DTV closed captioning display functionality into their DTV devices.<sup>30</sup> Additionally, the Television Decoder Circuitry Act of 1990, which established the first built-in

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<sup>29</sup> See NPRM, ¶ 60 (asking whether the Commission should adopt a 24-month deadline).

<sup>30</sup> NPRM, ¶ 60 n. 194 (citing *In the Matter of Closed Captioning Requirements for Digital Television Receivers, Report and Order*, 15 FCC Rcd 16788, 16808 (2000)).

decoder requirements for television, granted manufacturers approximately three years to achieve compliance.<sup>31</sup> Just as analog and later digital television manufacturers faced substantial challenges in developing new and compliant equipment, so too will apparatus manufacturers and VPPs and VPOs.

Moreover, providing differing deadlines for compliance by apparatus makers and VPDs/VPPs as compared to VPOs is consistent with the text and purposes of the CVAA. The CVAA grants the Commission broad discretion to determine deadlines with respect to Sections 202(b) and 203.<sup>32</sup> Staggered deadlines between various parties in a content provision ecosystem are sensible where some parties face more complex or novel tasks than others — the parties with the more difficult task are provided with time to test and ensure compliance while other parties with simpler tasks are already in full compliance providing necessary upstream or downstream inputs. Additionally, staggered compliance deadlines offer the opportunity for substantial first-mover market rewards for parties with lengthier compliance deadlines that are able to achieve compliance ahead of the schedule.

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Given Microsoft’s longstanding commitment to accessibility and our knowledge of the challenges facing the industry, we hope that these comments are helpful as the Commission works to complete its implementation of the CVAA’s requirements. We look forward to working with the Commission, representatives of the deaf and hard-of-hearing community, and

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<sup>31</sup> See Television Decoder Circuitry Act of 1990, Pub. L. No. 110-431, at § 5 (Oct. 15, 1990), *available at* [http://transition.fcc.gov/Bureaus/OSEC/library/legislative\\_histories/1395.pdf](http://transition.fcc.gov/Bureaus/OSEC/library/legislative_histories/1395.pdf). See generally *First VPAAC Report* at 7 (stating that the Television Decoder Circuitry Act “changed everything” with respect to closed captioning).

<sup>32</sup> See 47 U.S.C. § 613(c)(2)(B); CVAA § 203(d).

other industry leaders to adopt meaningful provisions for the availability of closed captioning over Internet Protocol while ensuring the flexibility to enable innovative devices and offerings.

Respectfully submitted,

*/s/ Gerard J. Waldron*

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